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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,497	10/02/2003	David Fries	1372.68.PRC	2496
21901	7590	06/27/2005	EXAMINER	
SMITH & HOPEN PA 15950 BAY VISTA DRIVE SUITE 220 CLEARWATER, FL 33760			PONOMARENKO, NICHOLAS	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/605,497

Applicant(s)

FRIES ET AL.

Examiner

Nicholas Ponomarenko

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Prosecution on the merits of this application is reopened on claims 3-13 considered unpatentable for the reasons indicated below: claims read on a newly found prior art.
2. A telephone call was made to Mr. Ronald Smith on June 20, 2005 to resolve the issue of patentability with the help of an Examiner's amendment, but Mr. R. Smith was on vacation and a substitute attorney was not available. The Office action on the merits appears below.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a pneumatic circuit" (claim 8), the "a mechanical load" (claim 9), the "a fluidic load" (claim 10) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

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and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The disclosure is objected to because of the following informalities:
- paragraph [0030] of the specification makes a statement that a phase change material, which is used in the claimed device, will act in accordance "with Boyle's law". This statement is believed to be in error. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 3-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "by activating" in 4. There is insufficient antecedent basis for this limitation in the claim.

The claim 3 is generally narrative and indefinite, failing to conform with current U.S. practice, because the language of the claim, e.g., "load in fluid communication with said energy reservoir", does not provide desired clarity and precision, since the scope of the invention sought to be patented cannot be determined from the language of the claim with a reasonable degree of certainty. *In re Wiggins*, 488 F.2d 538, 179 USPQ 421 (CCPA 1973).

Claims 4-13 are indefinite because they depend on the rejected claim and do not correct the noted problem.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. As broadly as they can be understood and interpreted, Claims 3, 4 and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Chih-Kang (US 4,209,992) or Bussing (US 6,062,018).

Prior art teaches a method for harnessing the energy in compressed fluid by activating a phase change in a phase change material positioned in a constant volume

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container. Prior art also teaches turbine, pressure storage tank, pneumatic circuit, mechanical load and fluidic load, essentially as in applicant's claims.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Chih-Kang (US 4,209,992) or Bussing (US 6,062,018) as applied to claims 3, 4 and 7-13 above, and further in view of Mollere (US 3,592,287) or Taylor (US 5,552,656).

Chih-Kang or Bussing teach a method for harnessing the energy in compressed fluid by activating a phase change in a phase change material positioned in a constant volume container with turbine, pressure storage tank, pneumatic circuit, mechanical load and fluidic load, essentially as in applicant's claims, but fail to teach a pump or a piezoelectric as a pressure-driven load.

Moullere teaches a pump and Taylor teaches a piezoelectric generator, which can be utilized in the applicant system as a design options.

The test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in the pertinent art.

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*In re Mapelsden*, 51 CCPA 1123, 329 F.2d 321, 141 USPQ 30 (1964).

*In re Henley*, 44 CCPA 701, 239 F.2d 3, 112 USPQ 56 (1956).

*In re Bozek*, 163 USPQ 545 (1969).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a system as taught by Chih-Kang and to utilize pump and/or piezoelectric as taught by Mollere or Taylor in order to apply pressure to required load, if there are such needs of application.

### **Conclusion**

11. The prior art made of record and not relied upon is considered pertinent to applicant(s) disclosure.

12. When the claims are amended, applicant(s) should state in detail where in the original disclosure or in the drawings the amended features find support. **No new matter may be introduced.**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Ponomarenko whose telephone number is (571) 272- 2033, Fax: (571) 273-2033, or to his SPE Darren Schuberg – (571) 272-2044.

14. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2800 Customer Service  
Phone: (571) 272-2815

np  
June 20, 2005



**Nicholas Ponomarenko  
Primary Examiner  
Technology Center 2800**